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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,600	05/31/2001	Akira Arai	9319A-000222	8588

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EXAMINER

SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 08/13/2003

*CA*

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/871,600

Applicant(s)

ARAI ET AL.

Examiner

John P. Sheehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10, 12-14, 24-28, 30 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 12-14, 24-28, 30 and 32-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17. 6) ☐ Other:

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 15, 2003 has been entered.

### ***Claim Rejections - 35 USC § 102/103***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 to 8, 10, 12 to 14, 24 to 28, 30 and 32 to 34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hamano et al.

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(Hamano, Japanese Patent Document No. 11-288807, cited by applicants in the IDS submitted July 15, 2003).

Hamano teaches specific examples of bonded magnets made from alloy powders having compositions that are encompassed by the alloy composition recited in the instant claims (see translation, Table 2, Alloy Nos. 22 to 27). These alloys are comminuted to a particle size of 34 to 93 microns (Table 4, column 5) that are encompassed applicants' claim 14. The resulting powders are made into bonded magnets (translation, paragraph 0136) having coercivity values in the range 453.6 to 506.3 (translation, Table 5, Alloy Nos. 23 to 27) that are encompassed by the coercivity range of 430 to 750 kA/m recited in applicants' claims. Hamano also teaches that the alloy powder possess magnetically hard and soft phases (translation, paragraph 0126). Hamano teaches a method of making the alloy powder that appears to be the similar if not the same as applicants' disclosed process of making the instant claimed powder (compare translation, paragraphs 0105 to 0109 to the instant specification, paragraphs 0092 to 0095).

Hamano and the claims differ in that Hamano is silent with respect to the claimed expression  $(BH)_{\max}/\rho^2 [ \times 10^{-9} \text{J} \cdot \text{m}^3/\text{g}^2 ] \geq 2.40$ .

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloys taught by Hamano have compositions and bonded magnet coercivity values that are encompassed by the instant claims and are made by a process that is similar to, if not the same as, applicants' process. In view of this, the alloy taught by the reference would be expected to possess all the same properties as recited in the instant claims, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical

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or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

***Claim Rejections - 35 USC § 103***

3. Claims 1 to 8, 10, 12, 13, 24 to 28, 30 and 32 to 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panchanathan (Panchanathan, US Patent No. 5,72,792).

Panchanathan teaches a magnetic powder having a composition that overlaps the alloy composition recited in the instant claims (Panchanathan, column 1, lines 37 to 50). Panchanathan also teaches a process of making the disclosed magnetic powder that is similar to the process disclosed in the instant application (Panchanathan, column 2, lines 1-21) Panchanathan teaches the presence of a hard and soft magnetic phase (column 1, lines 50 to 57).

The claims and Panchanathan differ in that Panchanathan does not teach the exact same alloy composition, is silent with respect to the claimed expression  $(BH)_{\max}/\rho^2 [ \times 10^{-9} \text{J} \cdot \text{m}^3/\text{g}^2 ] \geq 2.40$  and does not teach the all the process limitations recited in the dependent claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the powder alloys taught by the references have compositions that overlap the alloy powder composition recited

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in the instant claims and therefore are considered to establish a prima facie case of obviousness, *In re Malagari*, 182 USPQ 549 and MPEP 2144.05. Further, in view of the fact that the alloys taught by Panchanathan are made by a process which is similar to, if not the same as, applicants' process of making the instantly claimed alloy, the alloys taught by Panchanathan would be expected to possess all the same properties as recited in the instant claims, including, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).” (emphasis added by the Examiner), see MPEP 2112.01.

Further, the coercive force recited in the applicants' claims is not the coercive force of the claimed magnetic powder but rather is the coercive force of a bonded magnet made from the claimed powder. The properties of the bonded magnet made from applicants' claimed powder would be expected to be a function of the process used to make the bonded magnet, such as for example, the amount of binder used. In view of this, the coercive force recited in the instant claims is not considered to distinguish the claimed alloy powder from Panchanathan's powder. With respect to the process limitations recited in the instant claims it is the Examiner's position that the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

***Response to Arguments***

1. Applicant's arguments filed July 15, 2003 have been fully considered but they are not persuasive.

Applicants argue that in the examples Panchanathan teaches a coercive force of 5.02 kOe (399.9 kA/m) for a bonded magnet (Panchanathan, column 3, line 35) whereas in contrast the instant claims require the bonded magnet made from the claimed alloy powder to have a coercive force of 430 to 750 kA/m. The Examiner is not persuaded. The instant claims are directed to an alloy powder and not to a bonded magnet. The coercive force recited in the applicants' claims is not the coercive force of the claimed magnetic powder but rather is the coercive force of a bonded magnet made from the claimed powder. The properties of the bonded magnet made from applicants' claimed powder would be expected to be a function of the process used to make the bonded magnet, such as for example, the amount of binder used, pressures, temperature, etc. used in making the bonded magnet. In view of this, the coercive force recited in the instant claims is not considered to distinguish the claimed alloy powder from Panchanathan's powder. Further, Panchanathan teaches that the disclosed bonded magnet has a coercivity of up to 10 kOe (795.8 kA/m, column 4, line 45) which encompasses the coercivity of 430 to 750 kA/m recited in the instant claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for

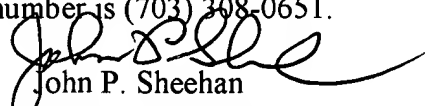
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the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742

jps

August 9, 2003